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DEPARTMENT OF THE ARMY
OFFICE OF THE ADJUTANT GENERAL
WASHINGTON, D.C. 20310

IN REPLY REFER TO

AGAM-P (M) (5 Feb 68) FOR OT RD-674190

14 February 1968

SUBJECT: Operational Report - Lessons Learned, Headquarters, 4th
Battalion, 60th Artillery, Period Ending 31 Oct 1967 (U)

TO: SEE DISTRIBUTION

1. Subject report is forwarded for review and evaluation by USACDC in accordance with paragraph 6f, AR 1-19 and by USCONARC in accordance with paragraph 6c and d, AR 1-19. Evaluations and corrective actions should be reported to ACSFOR OT within 90 days of receipt of covering letter.
2. Information contained in this report is provided to insure appropriate benefits in the future from Lessons Learned during current operations, and may be adapted for use in developing training material.

BY ORDER OF THE SECRETARY OF THE ARMY:

Kenneth G. Wickham

KENNETH G. WICKHAM
Major General, USA
The Adjutant General

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 4TH BATTALION, 60TH ARTILLERY
APO 96238

AVGK-AF-S3

31 October 1967

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS-CSEFOR-65)(UIC-WFUZLA) (U)

TO: See Distribution

SECTION 1 (C) SIGNIFICANT ORGANIZATION OR UNIT ACTIVITIES

1. (C) General:

During the period 1 August 1967 thru 31 October 1967, the 4th Battalion, 60th Artillery with attached Battery E(MG), 41st Artillery operated throughout the Republic of Vietnam II Corps Tactical Zone in support of United States and Free World Military Assistance Forces. The Battalion organization for combat was changed on 10 October 1967 pursuant to IFFORCEV Artillery instructions and is reflected at Inclosure 1 hereto.

2. (C) Intelligence: The intelligence information received by the Battalion Intelligence Section continues to be on an irregular basis. This information consists of INSTSUM'S from major units in the II Corps Tactical Zone. Very little information is gathered from Battalion sources due to their wide tactical dispersion and poor communications. Units obtain current intelligence concerning their area of operation from supported units. This information includes Agent Reports, LRRP and patrol observations, enemy locations and estimated strengths, and results of friendly operations.

3. (C) Operations and Training Activities:

a. Plans: Automatic Weapons support for the Republic of Vietnam and other Free World Military Assistance Forces is currently being considered by IFFORCEV Artillery.

b. Operations: All operational fire units of the 4th Battalion, 60th Artillery and attached Battery E(MG), 41st Artillery, were tactically committed for ninety-two(92) days during this reporting period.

(1) Headquarters Battery: Headquarters Battery personnel man two(2) Maintenance Floats, M42A1 Twin 40MM Guns, in support of the Qui Nhon Support Command. One track is located at LST Beach, coordinates CR 114226, and one at Phu Tai Ammunition Depot, coordinates CR 028162.

(2) Battery A:

(a) Battery A(-) with attached Section A, Battery E(MG), was attached to the 6th Battalion, 32nd Artillery until 10 October 1967. On 10

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DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS

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October 1967, Battery A with its attached (MG) Section was further attached to 41st Artillery Group and OPCON to the 6th Battalion, 32nd Artillery. The (MG) Section was further OPCON with two(2) squads supporting the Tuy Hoa Sub Area Command and two(2) squads supporting 41st Artillery Group elements until 24 October 1967 when they were placed OPCON to the 173rd Airborne Brigade. Battery elements participated in OPERATION BOLLING performing perimeter defense and convoy escort missions.

(b) 1st Platoon, Battery A with attached Section E, Battery E(MG), remains attached to the 2nd Battalion, 7th Cavalry participating in OPERATION BYRD. Tactical elements performed direct support, work party security, convoy escort and perimeter defense missions.

(3) Battery B:

(a) Battery B(-) remains attached to the 52nd Artillery Group. The 1st Platoon, Battery B with attached Section B, Battery E(MG), was detached from the 1st Air Cavalry Division(AM) and attached to 41st Artillery Group on 10 October 1967. These elements were further placed OPCON to the 1st Air Cavalry Division(AM). The 2nd Platoon, Battery B with attached Section F, Battery E(MG), was detached from the 4th Infantry Division and attached to the 52nd Artillery Group, on 10 October 1967. These elements were further placed OPCON to the 4th Infantry Division. 1st Platoon elements supported OPERATION PERSHING and performed direct support, strong point security and perimeter defense missions. The second platoon elements supported OPERATIONS FRANCIS MARION, GREELEY and MACARTHUR performing perimeter defense, work party security, convoy escort and bridge security missions.

(4) Battery C: Battery C with attached Section C, Battery E(MG) was detached from the 1st Air Cavalry Division(AM) and further attached to 41st Artillery Group on 10 October 1967. The Battery was then placed OPCON to the 1st Air Cavalry Division(AM), with subordinate elements further OPCON to various divisional units in support of OPERATION PERSHING performing direct support, perimeter defense, work party security, convoy escort, and bridge security missions.

(5) Battery D: Battery D with attached Section D, Battery E(MG), was detached from the 4th Infantry Division and further attached to 52nd Artillery Group on 10 October 1967. The Battery was then placed OPCON to the 4th Infantry Division with subordinate elements further OPCON to various divisional units in support of OPERATIONS FRANCIS MARION, GREELEY and MACARTHUR, performing perimeter defense, convoy escort, work party security and bridge security missions.

(6) Battery E(MG), 41st Artillery: The Machine Gun Sections, with fire units performing bridge security, perimeter defense and convoy escort missions, are attached to units of the 4th Battalion, 60th Artillery as shown below:

(a) Section A is attached to Battery A

(b) Section B is attached to Battery B

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- (c) Section C is attached to Battery C
- (d) Section D is attached to Battery D
- (e) Section E is attached to Battery A
- (f) Section F is attached to Battery B

(7) The 4th Battalion, 60th Artillery with attached Battery B(MG), 41st Artillery has been employed on perimeter defense, convoy escort, work party security, road and bridge security, and direct support on search and destroy missions.

(a) Perimeter Defense: Operational fire units of this Battalion perform perimeter defense, regardless of location, each night throughout the II Corps Tactical Zone as is reflected at Inclosure 2 hereto. An aggressive artillery H & I program is used in the PERSHING, BYRD and ROK areas of operation (Note para 7, Artillery).

(b) Convoy escort is provided as directed by supported units.

(c) Road and bridge security is provided as directed by supported units. Fire units are employed in static security at positions indicated:

- 1 2 M42's, BR 032514 (Bridge security)
- 2 2 M42's, BR 144535 (Bridge security)
- 3 4 M42's, BR 873955 (Bridge security)
- 4 2 M55's, CQ 210350 (Bridge security)

(d) Work party security is provided as directed by supported unit.

(e) Direct support of the infantry on search and destroy missions has been provided on OPERATIONS PERSHING and BYRD. The M42's operate with the infantry as a track-infantry team. The mobility and high rate of fire have been extremely effective in destroying ambushes and strong points.

b. Training:

(1) The Battalion training program is designed for squad level training with records being maintained at battery level. Due to the wide dispersion of all Battalion firing elements, this system was initiated to insure presentation of all mandatory subjects.

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(2) The Battalion replacement training program is further designed to orient replacements to the Vietnamese Conflict and the Battalion's direct support role. This training is essential as MOS 13F10 replacements are primarily trained for the air defense mission.

(3) The Battalion Education Program is oriented to encourage correspondence courses. Consequently, fifty-one(51) enlisted men have been administered the High School GED Test, resulting in forty-two(42) of these enlisted men successfully completing the test.

c. Chemical: N/A

d. Paywar: N/A

4. (U) Logistics: During this reporting period, the battalion has operated under a consolidated supply system. Inasmuch as there is no requirement to furnish ammunition resupply from this headquarters, the Battalion Ammunition Section has been utilized to transport other supply items to the widely dispersed fire units. The consolidated supply system is now providing support which was not considered adequate by area support facilities under the de-centralized system.

a. Prescribed Load List (PLL)

(1) Authorized stockage	813 items
(2) On Hand	598 items
(3) Percentage on Hand	74%

(a) The low percentage of PLL on hand is due to line items added as a result of new demand factors.

b. Maintenance:

(1) Deadline Rate.

(a) M42A1	2.4%
(b) M55	1.0%
(c) Wheel vehicles	5.0%

(2) Mileage

(a) M42A1	40,092 miles
(b) Wheel vehicles	441,340 miles

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5. (U) Civil Affairs:

a. Medical Care: The Battalion Medical Action Program treated a total of 186 Vietnamese general medical patients during the reporting period.

b. Civic Action: The Vietnamese people of this area are very receptive to the Civic Action Program. The required program labor is being furnished by local civilians. Upon request from the MACV Sub-Sector Advisory Team 27, the battalion has furnished transportation, medical and technical advice.

(1) Assistance Program: Edible garbage is now being delivered to Xuan Phuong Orphanage located at CR 058352 which is being used to feed swine. Funds received from the sale of these swine are used to provide support for 60 orphans.

(2) Friendship Program:

(a) The Battalion conducted three(3) Friendship Programs to Hamlet Self Defense Forces. Subsistence items were dispensed to 64 families.

(b) MACV Sub-Sector Advisory Team 27 requested assistance in collecting items for CHILDREN'S TET on 17 September 1967. The province Chief had promised approximately 6000 gifts for all school children to celebrate the occasion. The members of this Battalion contributed the following for CHILDREN'S TET:

1 1914 candy bars

2 230 bars of soap

3 12 boxes of gum

6. (U) Personnel:

a. Strength: The 4th Battalion, 60th Artillery and Battery E(MG), 41st Artillery authorized and assigned strengths as of 31 October 1967 are as follows:

	AUTHORIZED				ASSIGNED			
	OFF	WO	EM	AGG	OFF	WO	EM	AGG
4th Bn, 60th Arty	37	3	658	698	33	3	571	607
Btry E, 41st Arty	2	0	115	117	1	0	76*	77
TOTAL	39	3	773	815	34	3	647*	684

* Indicates understrength due to transfer of personnel to the 1st Bn, 44th Arty.

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b. Gains and Losses:

	GAINS				LOSSES			
	OFF	WO	EM	AGG	OFF	WO	EM	AGG
4th Bn, 60th Arty	7	0	31	38	10	0	274	284
Btry E, 41st Arty	0	0	7	7	0	0	48	48
TOTAL	7	0	38	45	10	0	322	332

c. Casualties during reporting period:

<u>TYPE</u>	<u>NUMBER</u>
Killed in Action	0
Died of Battle Wounds	0
Wounded in Action	10
Missing in Action	0
Non-Battle	0
TOTAL	10

d. Rest and Recuperation Program: This Headquarters received the following allocations during the reporting period:

	<u>OUT-OF-COUNTRY</u>	<u>IN-COUNTRY</u>
AUGUST	35	3
SEPTEMBER	96	4
OCTOBER	78	3
TOTAL	259	10

e. Morale: The morale of the organization remains excellent.

f. Awards and Decorations: The following awards and decorations were presented during the reporting period:

Soldier's Medal	2
Bronze Star with "V" Device	9
Army Commendation Medal with "V" Device	2
Purple Heart	12
TOTAL	25

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g. Discipline, Law and Order: The following Judicial and Non-Judicial Actions were taken during the reporting period:

ARTICLE 15	14
SUMMARY COURT-MARTIAL	0
SPECIAL COURT-MARTIAL	2
GENERAL COURT-MARTIAL	<u>0</u>
TOTAL	16

h. Religious Activities: Religious services are available at the base camp on a regularly scheduled basis. The widely scattered locations of fire units require the Battalion Chaplain to make periodic visits to conduct services which average nine per week.

i. OPCON/Attachment of Firing Batteries to Supported Units: Due to the tactical dispersion of the firing batteries, difficulties exist inasmuch as personnel records and pay records are not in close proximity to the individual or the respective battery headquarters. To alleviate this situation and to provide support to the individual, personnel pay clerks accompany Class A Agents to field locations in an effort to assist with all pay inquiries, allotment changes and to promote the Army Savings program.

j. Personnel Understrength: This Battalion currently has a critical shortage of personnel with projected losses of significant proportions in the month of December 1967, January 1968, and February 1968. There has been a short-fall of projected gains and it appears that replacements will not be received for all projected losses. This undesirable situation will further the critical shortage of personnel now being experienced.

7. (C) Artillery: The following number of rounds have been fired by elements of this unit during the reporting period:

a. 40MM- 194,052 rounds.

(1) 24 fire units in support of the 4th Infantry Division and the 173rd Airborne Brigade fired 33,253 rounds.

(2) 22 fire units in support of the 1st Air Cavalry Division(AM) fired 106,893 rounds.

(3) 8 fire units in support of the 2nd Battalion, 7th Cavalry fired 28,216 rounds.

(4) 10 fire units in support of 41st Artillery Group elements fired 25,690 rounds.

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(5) 2 float fire units supporting Qui Nhon Support Command did not fire.

b. Caliber .50- 944,230 rounds.

(1) 8 M55's supported 1st Air Cavalry Division(AM) with 633,955 rounds.

(2) 8 M55's supported 4th Infantry Division and 173rd Airborne Brigade with 123,785 rounds.

(3) 4 M55's supported 2nd Battalion, 7th Cavalry with 119,100 rounds.

(4) 2 M55's supported 41st Artillery Group elements with 18,000 rounds.

(5) 2 M55's supported Tuy Hoa Sub Area Command with 49,390 rounds.

SECTION 2 (C) COMMANDERS OBSERVATIONS AND RECOMMENDATIONS

Part 1, Observation (Lessons Learned)

1. (C) Personnel:

a. Item: Personnel shortages within the battalion.

Discussion: Existing personnel shortages are currently hampering an effective, efficient operation. Due to recent transfer of 110 personnel to the 1st Battalion, 44th Artillery, and normal DEBOS, the Battalion is presently 177 personnel understrength. Short-fall of CONUS replacements has created this situation.

Observation: The timely assignment and/or infusion of qualified replacement personnel would have prevented the shortage now being experienced.

b. Item: Infusion program.

Discussion: Replacements for the 110 personnel transferred to the 1st Battalion, 44th Artillery have not been received at this headquarters. Massive infusion programs cause undue hardship on the unit and personnel concerned.

Observation: An infusion program should be initiated immediately after arrival in country. Prior to arrival in country each Battalion size unit should be aware of the problems involving heavy rotational humps. However, to preclude massive infusion programs, personnel should be infused in small numbers on a scheduled basis.

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c. Item: Payment of assigned personnel:

Discussion: Due to the wide dispersion of assigned personnel, the pay records are not in close proximity to the respective battery headquarters or the individual concerned. Normal pay discrepancies, changes in allotments, advance payments and normal pay inquiries cannot efficiently be processed.

Observation: Pay records should be maintained by a Finance and Accounting Office on an area basis in close proximity to the individual and his battery headquarters.

2. (C) Operations:

a. Item: M42 Position Area.

Discussion: Under normal conditions, minimum manning of M42's in perimeter of defense position is done by two(2) personnel. To minimize danger to the remaining crewman, who must man the M42 during an attack, a typical M42 position area has been adapted³.

Observation: The use of this type position area would minimize danger to M42 crewman during the initial stages of an attack.

b. Item: M55 Airlift by CH-47 Helicopter

Discussion: The M55, 50 Cal MG, is frequently airlifted into position by CH-47 Helicopter. The weather, terrain and tactical situation often prevents normal employment and requires the M55 to be airlifted. The M55 can be airlifted internally or externally by the CH-47⁴.

Observation: The procedures followed by this Battalion have been found satisfactory in airlifting the M55.

c. Item: Preventable Damage to Box Assembly, External Phone on the M42.

Discussion: Extensive damage has been caused by firing over the left rear of the track at 0 to -3 degrees elevation to the Box Assembly, External Phone. Muzzle blast for extended periods is the causative factor which can be prevented by positioning the M42 so that firing over the left rear is not required.

Observation: Proper positioning of the M42, will prevent damage to Box Assembly, External Phone.

3. (C) Training and Organization:

Item: Procedure for Computing Minimum Quadrant Elevation for the M42.

Footnote: 3 (See Incl 3 attached)

Footnote: 4 (See Incl 4 attached)

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Discussion: An Artillery Incident occurred as a result of Minimum Quadrant Elevation not being computed for the M42. All elements of data required by FM 6-40 for computation of Minimum Quadrant Elevation are not available in FT 40AA-A-3, dated 29 January 1946 or FT 40AA-A-5, dated 29 September 1967. A procedure for computing Minimum Quadrant Elevation for the M42 has been developed by this organization. This procedure has been submitted through channels to IFFORCEV Artillery for approval.

Observation: That the procedure submitted by this Battalion would preclude M42 Artillery Incidents caused by not having a Minimum Quadrant Elevation.

4. (U) Intelligence:

Item: Lack of timely intelligence.

Discussion: Most of the intelligence issued through normal distribution is approximately a week old and is too outdated to be of good operational value.

Observation: The intelligence section must establish an active daily liaison program with nearby intelligence processing agencies.

5. (C) Logistics:

a. **Item:** 40MM Gun, Bore Brush (Field expedient)

Discussion: Bore Brush, FSN 1010-474-5466 for the M79 Grenade Launcher is being issued in lieu of Bore Brush, FSN 1010-624-0944 for the 40MM Automatic Dual Gun, M2A1. This type of brush is inadequate to properly clean the 40MM Gun Bore. However, when steel wool is wrapped around the brush, sufficient abrasion is available to properly clean the bore of the 40MM Gun.

Observation: The improvised Bore Brush is satisfactory, if modified with steel wool to increase the diameter.

b. **Item:** Bunkers for Base Camp/rear area.

Discussion: Permanent position bunkers, constructed of sandbags and timber, have continued to be a safety hazard due to weather and termites. This problem has been solved by using available salvage materials. These modified bunkers, constructed in July 1967, show no appreciable deterioration.

Observation: The modified bunker is safe and is not effected by weather and termites. The monetary and time loss in re-building sandbag and timber bunkers has been eliminated.

Footnote: 5 (See Incl 5 attached)
Footnote: 6 (See Incl 6 attached)

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SUBJECT: Operational Report Lessons Learned for quarterly period ending
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Part II, Recommendations

1. (C) Personnel:

a. Reference Part I, Observations (Lessons Learned) Personnel.

b. The following actions are recommended:

(1) The timely assignment of replacement personnel to prevent degradation of unit combat effectiveness.

(2) That personnel not be transferred unless replacement personnel are available.

(3) That pay records be maintained in close proximity to the individual and his battery headquarters.

2. (C) Operations

a. Reference Part I, Observations (Lessons Learned) Operations.

b. The following actions are recommended:

(1) That distribution of the M42 positions used by this Battalion³ be made available to all other (AW)(SP) Battalions.

(2) That the procedures used in Airlifting the M55, Quad .50 Cal Machine Gun by CH-47, be disseminated to all IFFORCEV Units⁴.

(3) That all (AW)(SP) Battalions be informed of the damage which will result, to the Box Assembly, External Phone, if firing is conducted at 0 to -3 degrees elevation over the left rear of the M42.

3. (C) Training and Organization:

a. Reference Part I, Observations (Lessons Learned) Training and Organization.

b. The following action is recommended: That the procedures used by this Battalion for Computing Minimum Quadrant Elevation be disseminated to all (AW)(SP) Units for their information⁵.

Footnote: 3(See Incl 3 attached)

Footnote: 4(See Incl 4 attached)

Footnote: 5(See Incl 5 attached)

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4. (U) Intelligence:

a. Reference Part 1, Observations(Lessons Learned) Intelligence.

b. The following action is recommended: That Intelligence Agencies develop and maintain a sense of urgency in collecting and dissemination of information.


5. (C) Logistics:

a. Reference Part 1, Observations(Lessons Learned) Logistics.

(1) That information be disseminated to all (AW)(SR) Units, that Bore Brush, FSN 1010-474-5466 can be modified for use with the 40MM Gun, M241.

(2) That information pertaining to the modified bunkers be disseminated to units located in permanent base camps.

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W. J. MONYHAN
LTC, Artillery
Commanding

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AVGK-CO (31 Oct 67)

1st Ind

SUBJECT: Operational Report Lessons Learned for quarterly Period Ending
31 October 1967, (RCS CSFCR-65) (UIC WFUZAA) (U)

HEADQUARTERS, 41ST ARTILLERY GROUP, APO 96368, 14 November 1967

TO: Commanding General, I Field Force Vietnam Artillery, APO 96350

1. (U) The attached Operational Report from the 4th Bn, 60th Arty is approved and forwarded.

2. (U) The number of unit days the organization was engaged in operations and training is 92 and 10 respectively. The battalion made no movements which were not considered part of operations.

3. (U) Regraded unclassified when separated from classified document.

A.V. Arnold Jr.
A.V. ARNOLD JR.
Colonel, Artillery
Commanding

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AVFA-AT-D (31 Oct 67)

2d Ind

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967 (RCE-CSFOR-65) (UIC-WF02AA) (4th Bn, 60th Arty)
(U)

Headquarters, I Field Force Vietnam Artillery, APO 96350, 29 November 1967

TO: Commanding General, I Field Force Vietnam, ATTN: AVFA-GC-OT, APO
96350

1. Concur in the observations and recommendations contained in basic communication and previous indorsement.

2. Reference: Section 2, Part II, paragraph 1b (3), page 11.
Noneconcur. The battalion would lose management control of financial matters. Batteries are not organized to administer effectively financial activities.

3. Reference: Section 2, Part II, paragraphs 2b(1) and 2b(3), page 11.
This information will be disseminated in a future I FFORCEV Arty Newsletter.

4. Reference: Section 2, Part II, paragraph 2b(2), page 11. This information is published in the December 1967 issue I FFORCEV Arty Newsletter.

5. Reference: Section 2, Part II, paragraph 3b, page 11. The procedure for computing minimum Quadrant Elevation for the M42 40mm system is being evaluated for validity and accuracy.

FOR THE COMMANDER:



DONALD L. BURTON
MAJ, ARTY
Adjutant

6 Incl
no

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AVFA-GC-OT (31 Oct 67)

3d Ind

SUBJECT: Operational Report - Lessons Learned for Quarterly Period Ending
31 October 1967 RCS CSFOR-65 UIC WFUZAA 4th Bn, 60th Arty (U)

HEADQUARTERS, I FIELD FORCE VIETNAM, APO 96350

TO: Commanding General, United States Army Vietnam, ATTN: AVHGC-DST,
APO 96375

This headquarters has reviewed the 4th Battalion, 60th Artillery Operational Report-Lessons Learned for the Quarterly Period Ending 31 October 1967 and concurs with the observations and recommendations of the basic document and previous indorsements except as follows:

Reference Part II, Section II (pages 11 and 12), Commander's Observations:

a. Paragraph 1b(1): Concur. This headquarters is aware of the existing personnel shortages in the unit. USARV has been informed that EM with other MOSs are acceptable.

b. Paragraph 5a(1): Nonconcur. Bore brushes are not interchangeable and the use of steel wool reduces tube life. Qui Nhon Depot has a zero balance on bore brushes for 40mm Auto Dual Gun M2A1, but has forwarded a request to the 14th ICC for redistribution of in-country assets. In addition, the depot is increasing its requisition objective.

FOR THE COMMANDER:

6 Incls
nc


B. L. CHERAUD
2LT, AGC
Asst Adjutant General

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AVHGC-DST (31 Oct 67)


3d Ind (II)

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3. A copy of this indorsement will be furnished to the reporting unit through channels.

FOR THE COMMANDER:

6 Incl
nc


C. S. NAKATSUKASA
Captain, AGC
Assistant Adjutant General

Copies furn:
HQ, 4th Bn, 60th Arty
HQ, I FFV

20

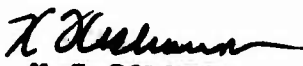
GPOP-DT(31 Oct 67) 4th Ind (U)
SUBJECT: Operational Report for the Quarterly Period Ending 31 October
1967 from HQ, 4th Bn, 60th Arty (UIC: WPUZAA) (RCS CSFOR-65)

HQ, US ARMY, PACIFIC, APO San Francisco 96558 16 JAN 1968

TO: Assistant Chief of Staff for Force Development, Department of the
Army, Washington, D. C. 20310

This headquarters has evaluated subject report and forwarding
indorsements and concurs in the report as indorsed.

FOR THE COMMANDER IN CHIEF:


K. F. OSBOURN
MAJ, AGC
Asst AG

CONFIDENTIAL

AVGK-AT-S3

31 October 1967

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS: CSFOR-65)(UIC-WFUZAA) (u)

4TH BATTALION (AW)(SP), 60TH ARTILLERY ORGANIZATION FOR COMBAT

1. (C) Period 1 August-9 October 1967

a. Attached to 41st Arty Group

Hq and Hq Battery w/Battery A(MG), 41st Arty

b. Attached to 6th Battalion, 32nd Arty

(1) Battery A(-)

(2) One section, Battery E(MG), 41st Arty

c. Attached to 2nd Bn, 7th Cav

(1) 1st Plt, Battery A

(2) One section, Battery E(MG), 41st Arty

d. Attached to 52nd Arty Group

Battery B(-)

e. Attached to 1st Air Cavalry Division

(1) Battery C

(2) 1st Plt, Battery B

(3) Two sections, Battery E(MG), 41st Arty

f. Attached to 4th Inf Div

(1) Battery D

(2) 2nd Plt, Battery B

(3) Two sections, Battery E(MG), 41st Arty

2. (C) Period 9 October 1967 thru 31 October 1967 as changed by message
from AVFA-AT-D.

3. (C) Effective 100001H October 1967, 4th Battalion (AW)(SP), 60th
Artillery with attached Battery E(MG), 41st Arty is attached for operational
control to Headquarters IFFORCEV Artillery with no change in present locations
or mission.

19 1

Incl 1

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GROUP-4
DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS

CONFIDENTIAL

AVGK-AF-S3

31 October 1967

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS: CSFOR-65) (UIC-WFUZAA) (U)

a. Attached to 41st Arty Group

- (1) Hq and Hq Battery w/Battery E(MG), 41st Arty attached
- (2) Battery Hq and 2d Plt, Battery A
- (3) 1st Plt, Battery B
- (4) Battery C
- (5) Three sections, Battery E(MG), 41st Arty

b. Attached to 52d Arty Group

- (1) Battery Hq and 2d Plt, Battery B
- (2) Battery D
- (3) Two sections Battery E(MG), 41st Arty

c. Attached to TF 2nd Bn, 7th Cav

- (1) 1st Plt, Battery A
- (2) One section, Battery E(MG), 41st Arty

4. (C) The attachments in para 4, are for maintenance support and training only. Personnel and administrative actions, to include military justice remain with Battalion. Quarters and all classes of supply, less TO&E and TA 50-901, are responsibility of major subordinate command in whose area elements are deployed.

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2

CONFIDENTIAL

CONFIDENTIAL

AVGK-4F-S3

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS: CSFOR-65) (UIC: AFUZAA) (U)

31 October 1967

Unit Locations, 31 October 1967

UNIT	COORD	OPCON	ATCH
HMB/4/60(-)	BR 968252		41st Arty Gp
HMB/4/60			
(1 M42 Float)	CR 116227	Qui Nhon Support Command	
HMB/4/60			
(1 M42 Float)	CR 028162	93d MP Bn	41st Arty Gp
A/4/60(-)	BP 962763	6th Bn, 32d Arty	2d Bn, 7th Cav
1/A/4/60	AN 800070		2d Bn, 7th Cav
A111	AN 796068		2d Bn, 7th Cav
A112	AN 796068		2d Bn, 7th Cav
A121	AN 796068		2d Bn, 7th Cav
A122	AN 796068		2d Bn, 7th Cav
A131	AN 733130		2d Bn, 7th Cav
A132	AN 733130		2d Bn, 7th Cav
A141	AN 725133		2d Bn, 7th Cav
A142	AN 725133		2d Bn, 7th Cav
2/A/4/60(-)	CQ 153480	6th Bn, 32d Arty	2d Bn, 7th Cav
A211	BP 962768	6th Bn, 32d Arty	41st Arty Gp
A212	BP 962768	6th Bn, 32d Arty	41st Arty Gp
A221	CQ 265326	6th Bn, 32d Arty	41st Arty Gp
A222	CQ 265326	6th Bn, 32d Arty	41st Arty Gp
A231	CQ 071716	6th Bn, 32d Arty	41st Arty Gp
A232	CQ 071716	6th Bn, 32d Arty	41st Arty Gp
A241	CQ 153480	6th Bn, 32d Arty	41st Arty Gp
A242	CQ 153480	6th Bn, 32d Arty	41st Arty Gp
B/4/60(-)	Z4 228535		52d Arty Gp
1/B/4/60(-)	BR 924749	C Btry, 4th Bn, 60th Arty	41st Arty Gp
B111	BR 924749	1st Bn, 77th Arty	41st Arty Gp
B112	BR 924749	1st Bn, 77th Arty	41st Arty Gp
B121	BR 924749	1st Bn, 77th Arty	41st Arty Gp
B122	BR 924749	1st Bn, 77th Arty	41st Arty Gp
B131	BR 900400	41st Arty Gp	HMB, 4th Bn, 60th Arty
B132	BR 900400	41st Arty Gp	HMB, 4th Bn, 60th Arty
B141	BR 915849	1st Bn, 77th Arty	41st Arty Gp
B142	BR 915849	1st Bn, 77th Arty	41st Arty Gp
2/B/4/60(-)	BR 144535	2d Sqd, 1st Cav	52d Arty Gp
B211	ZB 010217	2d Bn, 8th Inf	52d Arty Gp
B212	ZB 010217	2d Bn, 8th Inf	52d Arty Gp
B221	ZB 010217	2d Bn, 8th Inf	52d Arty Gp
B222	ZB 010217	2d Bn, 8th Inf	52d Arty Gp
B231	BR 032514	2d Bn, 8th Inf	52d Arty Gp
B232	BR 032514	2d Bn, 8th Inf	52d Arty Gp
B241	BR 144535	2d Bn, 8th Inf	52d Arty Gp
B242	BR 144535	2d Bn, 8th Inf	52d Arty Gp

Incl 2

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GROUP - 4
DOWNGRADED AT 3 YEAR INTERVALS
DECLASSIFIED AFTER 12 YEARS

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AVGK-AF-S3

31 October 1967

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS-CSFOR-65)(UIC-WFUZAA) (U)

UNIT	COORD	OPCON	ATCH
C/4/60(-)	BR 847947	1st Cav Div(AM)	41st Arty Gp
1/C/4/60	BR 847947	1st Cav Div(AM)	41st Arty Gp
C111	BR 847947	2d Bn, 20th ARA	41st Arty Gp
C112	BR 847947	2d Bn, 20th ARA	41st Arty Gp
C121	BR 882998	2d Bn, 19th Arty	41st Arty Gp
C122	BR 882998	1st Bn, 77th Arty	41st Arty Gp
C131	BR 799829	1st Bn, 77th Arty	41st Arty Gp
C132	BR 799829	1st Bn, 77th Arty	41st Arty Gp
C141	BR 612597	2d Bn, 17th Arty	41st Arty Gp
C142	BR 612597	2d Bn, 17th Arty	41st Arty Gp
2/C/4/60(-)	BR 873955	1st Cav Div(AM)	41st Arty Gp
C211	BR 873955	1st Bn, 77th Arty	41st Arty Gp
C212	BR 873955	1st Bn, 77th Arty	41st Arty Gp
C221	BS 923185	2d Bn, 19th Arty	41st Arty Gp
C222	BS 923185	2d Bn, 19th Arty	41st Arty Gp
C231	BS 873955	1st Bn, 77th Arty	41st Arty Gp
C232	BS 873955	1st Bn, 77th Arty	41st Arty Gp
C241	BS 923185	2d Bn, 19th Arty	41st Arty Gp
C242	BS 923185	2d Bn, 19th Arty	41st Arty Gp
D/4/60	AR 793345	4th Div Arty	52d Arty Gp
1/D/4/60	AQ 912456	4th Bn, 42d Arty	52d Arty Gp
D111	AQ 912456	4th Bn, 42d Arty	52d Arty Gp
D112	AQ 912456	4th Bn, 42d Arty	52d Arty Gp
D121	BQ 005605	4th Bn, 42d Arty	52d Arty Gp
D122	BQ 005605	4th Bn, 42d Arty	52d Arty Gp
D131	AR 793345	4th Div Arty	52d Arty Gp
D132	AR 793345	4th Div Arty	52d Arty Gp
D141	BQ 005605	4th Bn, 42d Arty	52d Arty Gp
D142	BQ 005605	4th Bn, 42d Arty	52d Arty Gp
2/D/4/60	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D211	YA 922269	1st Bn, 92d Arty	52d Arty Gp
D212	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D221	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D222	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D231	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D232	ZA 112278	1st Sqd, 10th Cav	52d Arty Gp
D241	ZB 010219	2d Bn, 8th Inf	52d Arty Gp
D242	ZB 119154	Destroyed	
E/41(-)	BR 968252		HEB, 4th Bn, 60th Arty
E3	CQ 210350	173d Abn Bde	A Btry, 4th Bn, 60th Arty
E4	CQ 248373	Tuy Hoa Sub-Area Command	A Btry, 4th Bn, 60th Arty
E5	CQ 248373	Tuy Hoa Sub-Area Command	A Btry, 4th Bn, 60th Arty
E6	CQ 210350	173d Abn Bde	A Btry, 4th Bn, 60th Arty
E7	BR 924749	1st Bn, 77th Arty	1/B Btry, 4th Bn, 60th Arty
E8	BS 791645	2d Bn, 19th Arty	1/B Btry, 4th Bn, 60th Arty

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AVGK-AF-S3

31 October 1967

SUBJECT: Operational Report Lessons Learned for Quarterly Period Ending
31 October 1967, (RCS: CSFOR-65) (UIC-~~AFU244~~) (U)

UNIT	COORD	OPCON	ATCH
E9	BS 878170	2d Bn, 19th Arty	1/B Btry, 4th Bn, 60th Arty
E10	BR 612597	2d Bn, 17th Arty	1/B Btry, 4th Bn, 60th Arty
E11	BS 742119	2d Bn, 19th Arty	C Btry, 4th Bn, 60th Arty
E12	BR 799829	1st Bn, 77th Arty	C Btry, 4th Bn, 60th Arty
E13	BS 878170	2d Bn, 19th Arty	C Btry, 4th Bn, 60th Arty
E14	BR 915849	1st Bn, 77th Arty	C Btry, 4th Bn, 60th Arty
E15	AQ 912456	4th Bn, 42d Arty	D Btry, 4th Bn, 60th Arty
E16	AQ 912456	4th Bn, 42d Arty	D Btry, 4th Bn, 60th Arty
E17	YL 922269	1st Bn, 92d Arty	D Btry, 4th Bn, 60th Arty
E18	ZB 010217	2d Bn, 8th Inf	D Btry, 4th Bn, 60th Arty
E19	AN 796068	2d Bn, 7th Cav	1/A Btry, 4th Bn, 60th Arty
E20	AN 800070	2d Bn, 7th Cav	1/A Btry, 4th Bn, 60th Arty
E21	AN 785238	2d Bn, 7th Cav	1/A Btry, 4th Bn, 60th Arty
E22	AN 796068	2d Bn, 7th Cav	1/A Btry, 4th Bn, 60th Arty
E23	BQ 005605	4th Bn, 42d Arty	2/B Btry, 4th Bn, 60th Arty
E24	AQ 934659	2d Sqd, 1st Cav	2/B Btry, 4th Bn, 60th Arty
E25	AR 793345	4th Div Arty	2/B Btry, 4th Bn, 60th Arty
E26	AR 793345	4th Div Arty	2/B Btry, 4th Bn, 60th Arty

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DEPARTMENT OF THE ARMY
HEADQUARTERS, 4TH BATTALION, 60TH ARTILLERY
APO 96238

AVGK-AF-S3

31 October 1967

SUBJECT: M42 Position Areas

TO: See Distribution

1. Upon displacement to a new position, each M42 squad will prepare a position area to give maximum protection to personnel, equipment and ammunition.
2. Priorities for construction:
 - a. Personnel bunkers
 - b. Gun parapet
 - c. Ammunition bunkers
3. Personnel bunkers should be constructed with walls(4) sandbags thick. The roof will be constructed of P.S.P or heavy timbers with three(3) layers of sandbags on top. Water proofing should be placed on the roof for personnel comfort.
4. The Gun parapet will have sufficient interior area to facilitate crew maintenance. M42's will be pulled into position to preclude firing over the rear deck.
5. The ammunition bunker will be large enough to hold twenty(20) cans of 40MM ammunition.
6. Attached as inclosure 1 and 2 is a typical M42 Gun position. This design will be used if the terrain permits.

FOR THE COMMANDER:

2 Incl
as

Homer C. Scott
HOMER O. SCOTT
CPT, Artillery
Adjutant

DISTRIBUTION:
A PLUS
1 ea M42 squad

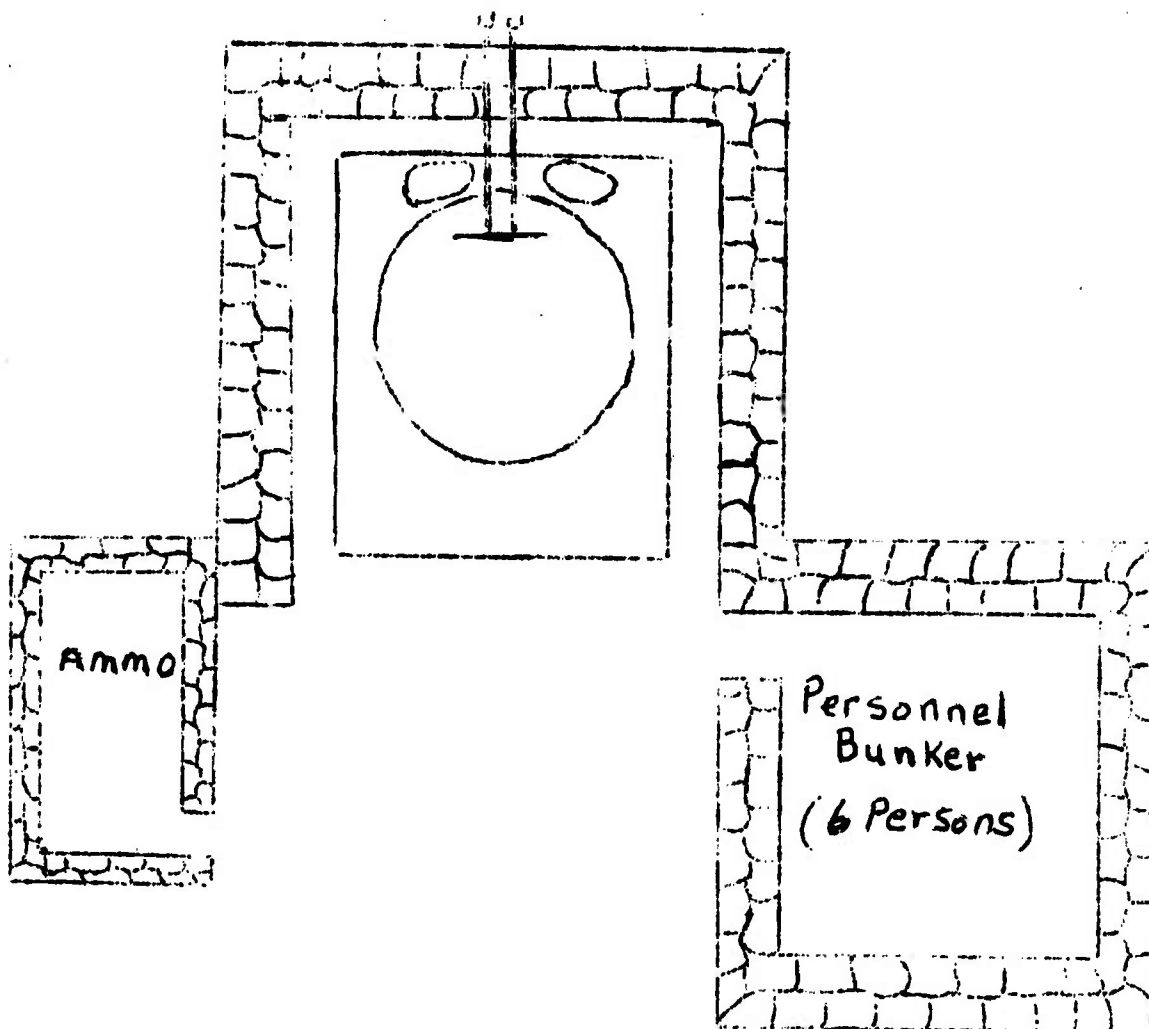
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Incl 3

27

TYPICAL M42 GUN POSITION

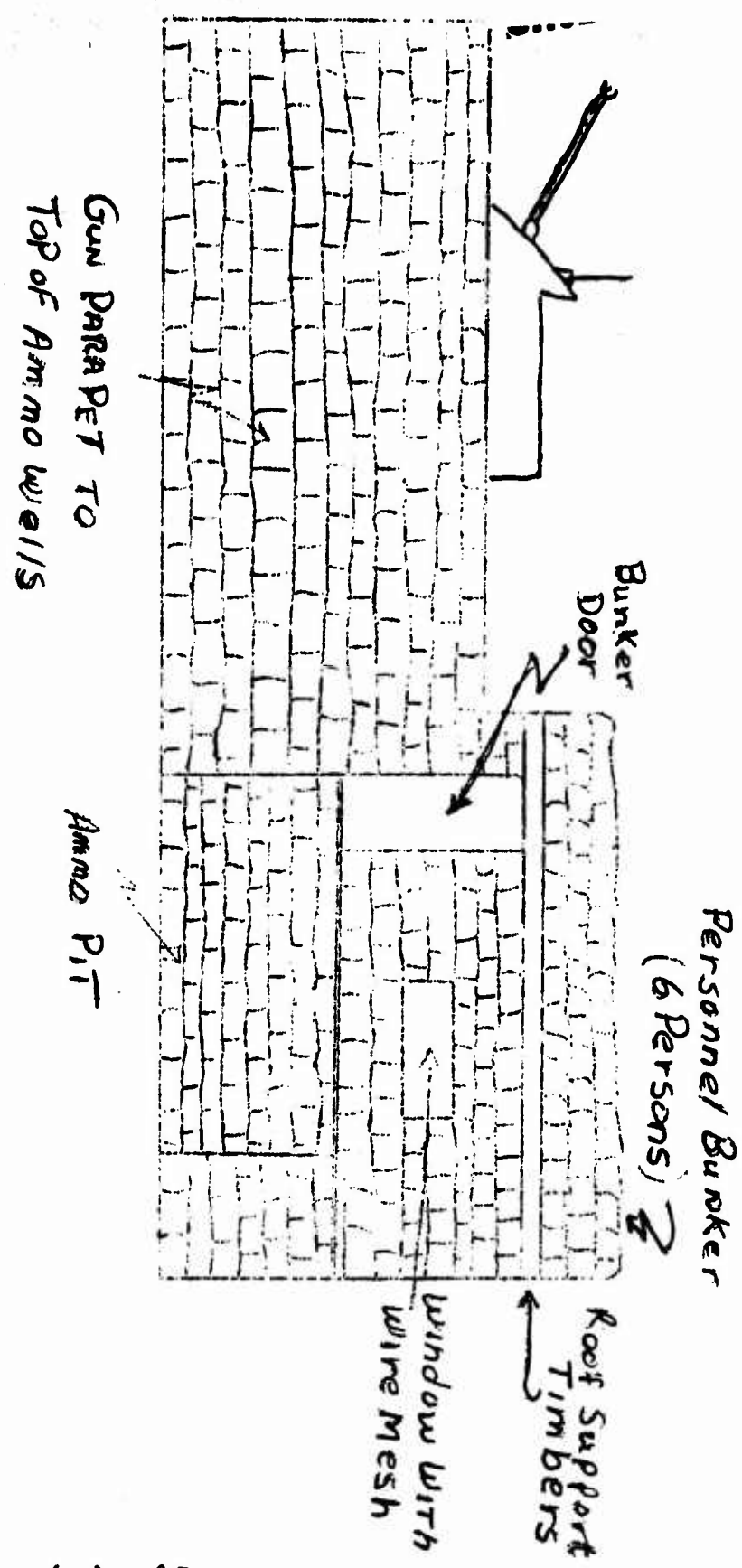
TOP VIEW



25

Incl 1 to Incl 3

TYPICAL M42 GUN POSITION SIDE VIEW



Incl 2 to Incl 3

29
DEPARTMENT OF THE ARMY
HEADQUARTERS, 4TH BATTALION, 60TH ARTILLERY
APO 96238

AVGK-AF-S3

31 October 1967

SUBJECT: Airlift of M55

TO: See Distribution

1. The M55 can be airlifted by CH-47 Helicopter. This method of movement can be accomplished with the M55 loaded internally or externally. The preferred method is to externally sling-load the M55.

2. Internal Airlift:

a. The M55 loaded internally with ammunition and tools carried externally requires an extended period of helicopter utilization time. This method should only be used when helicopter utilization is not critical. Consideration must also be given to an adequate road network for moving the M55, and also to helicopter landing zone utilization due to the time required to load and unload the M55. The following equipment is required.

- (1) 1 each 20 foot sling, cargo, FSN 1670-753-3794
- (2) 1 each donut, FSN 1670-360-0472
- (3) 1 each 4-22 cargo bag with liner, FSN 1670-242-9169
- (4) 1 each large clevis, FSN 1670-893-1631

b. The ammunition, tools, repair parts and duffel bags are placed in the cargo bag which is secured to one end of a twenty(20) foot sling. When the clevis with donut attached is secured to the other end, the load is ready for pickup.

3. External Airlift: The CH-47 lands to load the crew and upon take off picks up the previously prepared external load. In the new position area the CH-47 places the M55 and ammunition into firing position and lands to off-load the M55 crew.

a. This method is the most efficient as it conserves helicopter utilization time, landing zone utilization time, and permits the M55 to be lifted from the old firing position directly into the new position. The following equipment is required.

- (1) 4 ea 11 foot slings, cargo, FSN 1670-753-3791
- (2) 2 ea 20 foot slings, cargo, FSN 1670-753-3794

31 October 1967 30

SUBJECT: Airlift of M55

- (3) 4 ea small clevis, FSN 1670-360-0300
- (4) 2 ea large clevis, FSN 1670-893-1631
- (5) 1 ea donut, FSN 1670-360-0472
- (6) 1 ea 4-22 cargo bag with liner, FSN 1670-242-9169
- (7) 1 ea thin string, 20 inches long

b. Preparation:

- (1) The ammunition, tools, repair parts and duffle bags are placed in the cargo bag. The cargo bag is secured to one of the 20 foot slings.
- (2) The second 20 foot sling is wrapped around the lower cylindrical base of the M55 and secured by one(1) large clevis to the cargo bag sling.
- (3) Connect the eleven(11) foot slings to the M55 lifting shackles by using the four(4) small clevises. Nine(9), ten(10) or eleven(11) foot slings are satisfactory. Longer slings cannot be controlled during hook up and have a tendency to hang on the M55 mount causing damage at pick-up.
- (4) Connect the free ends of the eleven(11) foot slings to the large clevis and secure the donut.
- (5) The four(4) slings are bound together over the center of the M55 with thin string, preventing slings from becoming entangled in the M55 mount and eliminating the possibility of damage during pick-up.
- (6) It is advisable to have one M55 crewman with radio at the new location to guide the CH-47 into position.

FOR THE COMMANDER:

Harold O. Scott
HAROLD O. SCOTT
Capt, Artillery
Adjutant

DISTRIBUTION:

4

CORRECTED COPY

DEPARTMENT OF THE ARMY
HEADQUARTERS, 4TH BATTALION, 60TH ARTILLERY
APO 96238

AVGK-AF-S3

31 October 1967

SUBJECT: Procedure for Computing Minimum Safe Quadrant Elevation for the M42

TO: See Distribution

1. Effective immediately, the following procedures will be followed for computing minimum safe quadrant for the M42's when required to clear a mask.

2. Minimum safe quadrant consists of the following elements, which are obtained from the source indicated.

a. Angle of site is measured at the gun.

b. Comp site factor is extracted from comp site factor table, FT 40-44-A-3 and attached as Inclosure 1.

c. Elevation to achieve range to mask is extracted from FT 40-44-A-5 and attached as Inclosure 1.

d. Vertical clearance factor -0-500 meters, 15 μ ; 500-1000 meters 10 μ ; all ranges greater than 1000 meters, 5 μ .

3. Examples of minimum safe quadrant computations are:

a. Range 2300M, height of mask +62M

(1) Angle of site as measured at gun	+27.0 μ
(2) Comp site factor from chart	+1.1 μ
(3) Elevation to achieve range 2300M	+26.7 μ
(4) Vertical clearance factor, minimum safe quadrant to clear mask	$\frac{+5.0\mu}{+59.8\mu}$

b. Range 1100M, height of mask 46 meters below altitude of gun.

(1) Angle of site as measured at gun	-41.9 μ
--------------------------------------	-------------

Incl 5

AVGK-AF-83

31 October 1967

SUBJECT: Procedures for Computing Minimum Safe Quadrant Elevation for the
M42

- | | |
|--|---------------|
| (2) Comp site factor from chart, (Note: No comp site factor is used when firing below the horizontal). | 0.0m |
| (3) Elevation to achieve range 1100M | +9.4m |
| (4) Vertical clearance factor to clear mask | +5.0m |
| Minimum safe quadrant to clear mask | <u>-37.5m</u> |

FOR THE COMMANDER:

1 Incl
as

Homer O. Scott
HOMER O. SCOTT
CPT, Artillery
Adjutant

DISTRIBUTION:

4 PLUS
1 each M42 squad

33

Comp Site Factor Table

ANGLE OF SITE			
RANGE	0°-300°	300°-600°	600-800°
0	0.0	0.0	0.0
500	0.1	0.1	0.2
1000	0.2	0.4	0.8
1500	0.5	1.0	2.0
2000	1.2	1.8	4.3
2500	1.1	3.1	8.4
3000	1.6	5.1	14.3
3500	2.2	7.9	22.1
4000	2.9	11.3	31.5
4500	4.0	15.5	32.9
5000	5.2	20.6	-
5500	6.7	-	-

Above values are used when firing above the horizontal. No comp site is used when firing below the horizontal!

M-42 Firing Tables

SHELL HE		FUZE PD	
Range (Meters)	Elev (Mils)	Range (Meters)	Elev (Mils)
0-----	0.0	2800-----	37.7
100-----	0.7	2900-----	40.3
200-----	1.4	3000-----	43.0
300-----	2.2	3100-----	45.8
400-----	3.0	3200-----	48.7
500-----	3.8	3300-----	51.8
600-----	4.6	3400-----	55.0
700-----	5.5	3500-----	58.4
800-----	6.4	3600-----	61.8
900-----	7.4	3700-----	65.4
1000-----	8.4	3800-----	69.1
1100-----	9.4	3900-----	72.9
1200-----	10.5	4000-----	76.8
1300-----	11.6	4100-----	80.9
1400-----	12.8	4200-----	85.0
1500-----	14.1	4300-----	89.3
1600-----	15.4	4400-----	93.7
1700-----	16.8	4500-----	98.2
1800-----	18.2	4600-----	102.8
1900-----	19.8	4700-----	107.6
2000-----	21.4	4800-----	112.4
2100-----	23.1	4900-----	117.4
2200-----	24.8	5000-----	122.5
2300-----	26.7	5100-----	127.7
2400-----	28.7	5200-----	130.0
2500-----	30.8	5300-----	138.5
2800-----	33.0	5400-----	144.0
2700-----	35.3	5500-----	149.7

DEPARTMENT OF THE ARMY
HEADQUARTERS, 4TH BATTALION, 60TH ARTILLERY
APO 96238

21

AVGK-4F-83

31 October 1967

SUBJECT: Bunker for Base Camp/Rear Areas

TO: See Distribution

1. Bunkers have been designed by this headquarters which require a minimum of maintenance while conserving time and materials required in rebuilding standard bunkers. The materials utilized are salvaged 55 gallon drums, artillery powder canisters, and non pierced steel planking. These bunkers may be constructed in base camp/rear areas with the consent of supported local commanders.

2. Basic plan for a 10-15 man personnel bunker.

a. Materials required:

- (1) 34-salvaged 55 gal drums
- (2) 32-powder canisters(175MM)
- (3) 5-2'x12' pieces, N-PSP

b. Phase I

- (1) Cut the tops from the 55 gallon drums.
- (2) Place the bottom row of drums in position and fill with sand or dirt(See Incl 1).

c. Phase II. Place a second row of drums on top of the first row fill with sand and spot weld(See Incl 2).

d. Phase III. Place non-pierced steel planking(N-PSP) across the top and spot weld to the top of drums. Complete the roof by adding not more than three(3) layers of filled sandbags(See Incl 3).

e. Phase IV. Spot weld salvaged 175MM powder canisters as shown at Inclosure 4, and fill with sand.

f. Phase V, Paint to preserve the metal and improve area appearance (See Incl 5).

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Incl 6

36-
AVOK-AF-83

31 October 1967

SUBJECT: Bunkers for Base Camp/Rear Area

3. Perimeter Bunkers(Fighting Bunkers) can be constructed by modifying the basic plan to include fighting ports as shown at Inclosure 6. This bunker provides adequate space for two(2) folding cots as shown at Inclosure 7.

4. Permanent howitzer emplacement may also be constructed using salvaged 55 gallon drums as shown by Inclosure 8.

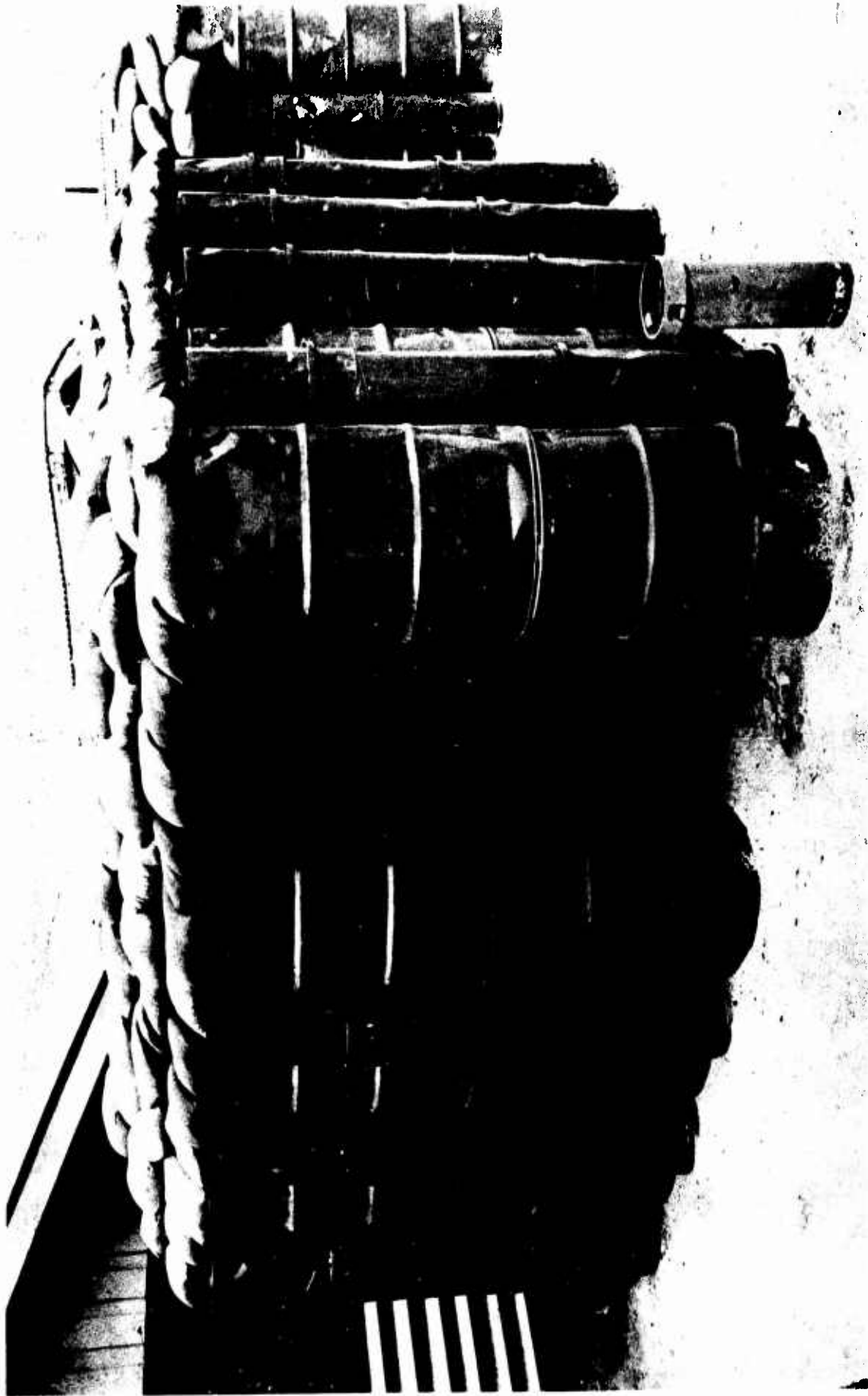
FOR THE COMMANDER:

4 Incl
as

Homer O. Scott
HOMER O. SCOTT
CPT, Artillery
Adjutant

DISTRIBUTION:

A



Incl 5 to Incl 6



Photo J. M. L.

UNCLASSIFIED

Security Classification

DOCUMENT CONTROL DATA - R & D

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d.			
10. DISTRIBUTION STATEMENT			
11. SUPPLEMENTARY NOTES N/A		12. SPONSORING MILITARY ACTIVITY OACSFOR, DA, Washington, D. C. 20310	

13. ABSTRACT

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